

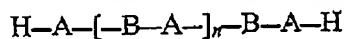
DOCKET NO.: UC 0409 US NA
Application No.: 10/782,357
Office Action Dated: November 22, 2006

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Remarks

Claims 1-25 are pending. Claim 16 is amended to be commensurate in scope with claim 9, from which it depends. The basis for the amendment is found, *inter alia*, in the specification at page 4, lines 22-23.

Claims 9, 12-13, 17 and 20-25 were rejected as anticipated by US Patent No. 5,681,664 (Tamano). Tamano discloses a hole-transporting material of formula (1),



where A is an aromatic amine derivative residue of formula (2) (Col. 3, lines 1-10) and B is a residue having formula (3) (Col. 3, lines 35-40), and n is an integer of 1 to 5,000.

The Office Action states that Tamano reads on the present claims, with reference to formula (III), when R² is hydrogen, R¹ is aryl, E is oxygen, and n is 1. Compound 27 in Tamano (Col. 13, last formula) appears to fit this description, if the additional limitation from the claims, that at least one aromatic ring of the compound of formula (III) has an alkoxy substituent (please see claims 16 [n=1, R² is H, and R¹ (per the current amendment) is phenyl] and claim 17 [alkoxy substituent on at least one aromatic ring]. This still does not make the Tamano hole-transporting compound equivalent to any compound embodied in claim 9. Applying the above criteria, and assuming that the left-hand R² is linked *para* to the amine nitrogen, that E is linked *para* to both amine nitrogens, that the right-hand R² is linked *para* to the amine nitrogen, and that both R¹ are *para*-substituted methoxy phenyl, Tamano cannot, with the given formulae, arrive at the same compound.

The repeating unit in Tamano, shown above, is $[-\text{B}-\text{A}-]_n$. Formula (27), and the other formulas disclosed in Table 1 of Tamano, are specific examples of -A- for formula (1), -A- being the formula (2) aromatic amine derivative residue. The repeating unit must also include -B-, the formula (3) residue, and must be end-capped with H-A- at one end and with -B-A-H at the other. In other words, Tamano does not disclose a compound or composition of formula (2) end-capped with -H having two triarylamine, each with a *para*-methoxyphenyl substituent, where the triarylamine moieties are bridged with an oxygen atom with *para*-linkage to both nitrogens, but a monomer that must be used in a copolymeric substance having that particular, or numerous other, configuration(s) (without the -H end-caps). The same reasoning applies to

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independent claims 20 and 24, both of which also include copolymers having distinct comonomers (please see the specification at page 5, lines 20-25).

Thus, Tamano cannot anticipate independent claims 9, 20 and 24. Dependent claims 12-13 and 17 depend from and further limit Claim 9, as dependent claims 22-23 and 25 depend from and further limit independent claims 20 and 24, respectively, and thus are patentable over the reference as well.

Claims 1, 5-8 and 20-25 stand rejected as anticipated by JP 2000-143786 (Katsumi). Please note that claim 1 and its dependent claims are based on formula (I) and in that formula the bridging substituent E does not lie between two triarylamine moieties as it does in formula (III). Formula (I) thus produces an asymmetric molecule and cannot be anticipated by the Katsumi molecule cited in the Office Action.

Independent claims 20 and 24 include formula (III) compounds. The R² arylamino group links, through the phenyl ring of R², to the terminal phenyl ring on either side of the repeat unit (formula (III)) and serves to end-cap the molecule. Katsumi does not anticipate formula (III) compounds.

Claims 1-23 and 25 stand rejected under 35 U.S.C. § 101 as allegedly claiming the same invention as Claims 1-7 and 9 of copending Application No. 11/093,455 ('455 Application). Applicants respectfully traverse the rejection. The MPEP states:

"Same invention" means identical subject matter. [citations omitted] A reliable test for double patenting under 35 U.S.C. 101 is whether a claim in the application could be literally infringed without literally infringing a corresponding claim in the patent. [citation omitted] Is there an embodiment of the invention that falls within the scope of one claim, but not the other? If there is such an embodiment, then identical subject matter is not defined by both claims and statutory double patenting would not exist.

MPEP 804.II.A.; emphasis added.

The claims of the two applications are not identical. For example, claim 1 of the '455 application includes compounds of formula (I) and formula (III), while claim 1 of the present application is directed to compounds of formula (I). Thus, it would be possible to literally infringe claim 1 of the '455 application without infringing claim 1 of the present application. Claim 2 of the '455 application is directed to compounds having formula (IV), a particular conformation of formula (I). Thus, claim 1 of the present application could be infringed without

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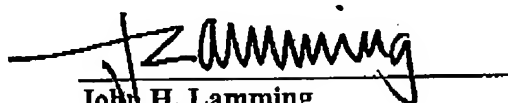
infringing claim 2 of the '455 application. There is no counterpart in the present application to claim 4 of the '455 application. Claim 6 of the '455 application has no counterpart in the present claims. Accordingly, Applicants respectfully submit that the statutory double patenting rejection is not appropriate in this case.

In addition, as stated previously, the present application has an earlier effective filing date than the '455 application, and Applicants respectfully believe that the prosecution can best be advanced by allowing this application to issue and rejecting the '455 Application for double patenting, if appropriate. *See* MPEP §804.

The Examiner is invited to call the undersigned if clarification is needed.

Respectfully submitted,

Date: March 22, 2007


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